

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,032,719 B2  
DATED : April 25, 2006  
INVENTOR(S) : Takachi

Page 1 of 7

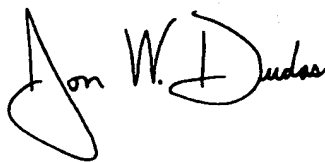
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The title page, showing an illustrative figure, should be deleted and substitute the attached title page.

Delete drawing sheets 1-5 and substitute the drawing sheets consisting of FIGS 1-5 as shown on the attached pages.

Signed and Sealed this

Sixth Day of June, 2006

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized, with a large, looped initial "J" and a cursive "Dudas".

JON W. DUDAS  
*Director of the United States Patent and Trademark Office*

(12) **United States Patent**  
**Takachi**

(10) **Patent No.:** **US 7,032,719 B2**  
(45) **Date of Patent:** **Apr. 25, 2006**

(54) **BICYCLE HUB WITH AN  
OUTSIDE-ACCESSIBLE BRAKE FORCE  
ADJUSTING MECHANISM**

(75) **Inventor:** Takeshi Takachi, Kawachinagano (JP)

(73) **Assignee:** Shimano, Inc., Sakai (JP)

(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** 10/604,814

(22) **Filed:** Aug. 19, 2003

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(51) **Int. Cl.**  
**B62L 5/00** (2006.01)  
**B60T 1/06** (2006.01)

(52) **U.S. Cl.** ..... 188/26; 188/17

(58) **Field of Classification Search** ..... 188/17,  
188/24.11, 26; 301/110.5, 105.1

See application file for complete search history.

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(57) **ABSTRACT**

A bicycle hub comprises a hub shaft structured to be rotatably mounted to a bicycle frame, a hub shell rotatably supported relative to the hub shaft, and a brake force control mechanism housed by the hub shell. The brake force control mechanism includes a brake force adjusting mechanism that can be accessed for adjustment while the brake force control mechanism is housed within the hub shell.

26 Claims, 5 Drawing Sheets

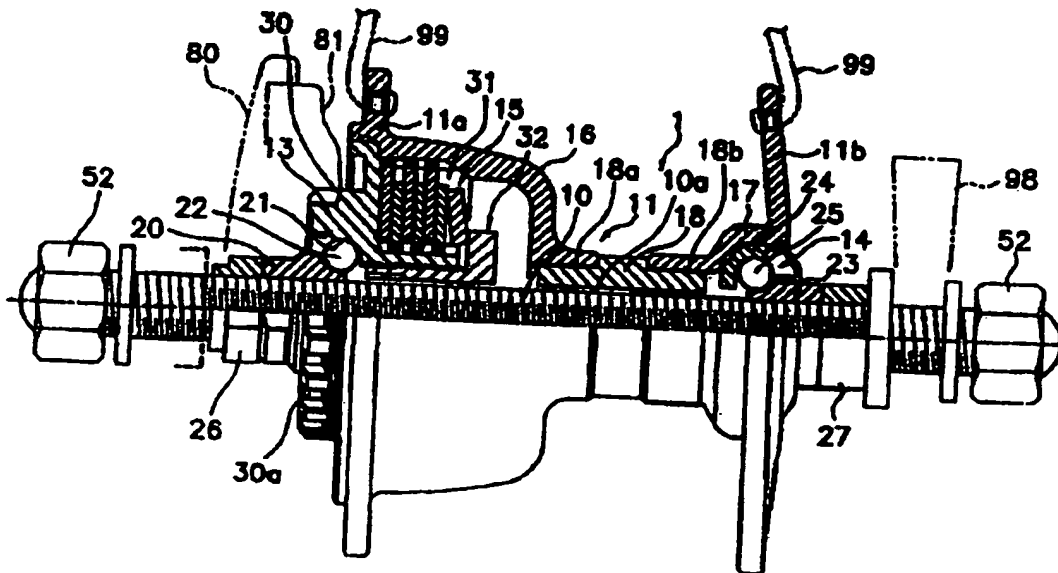
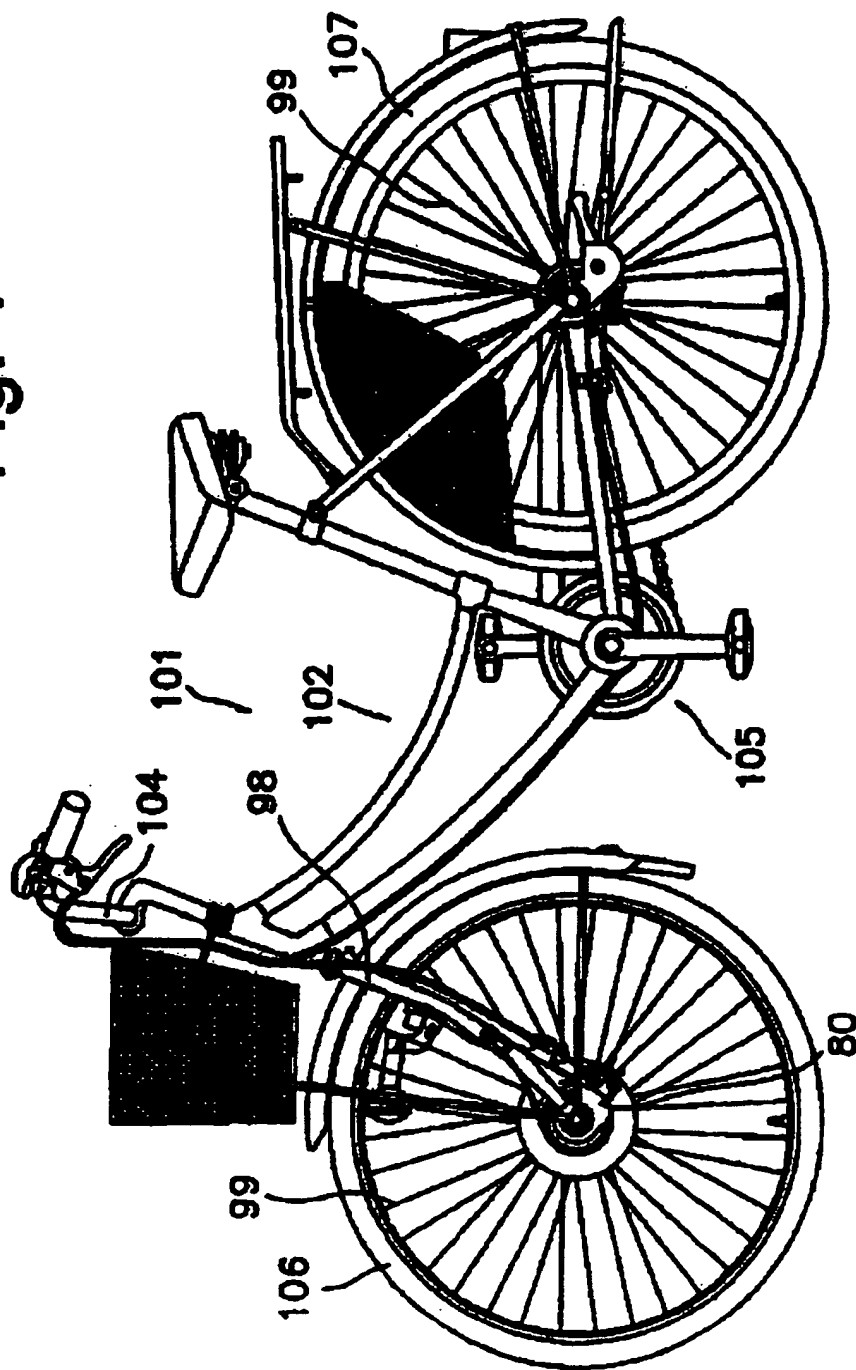


Fig. 1



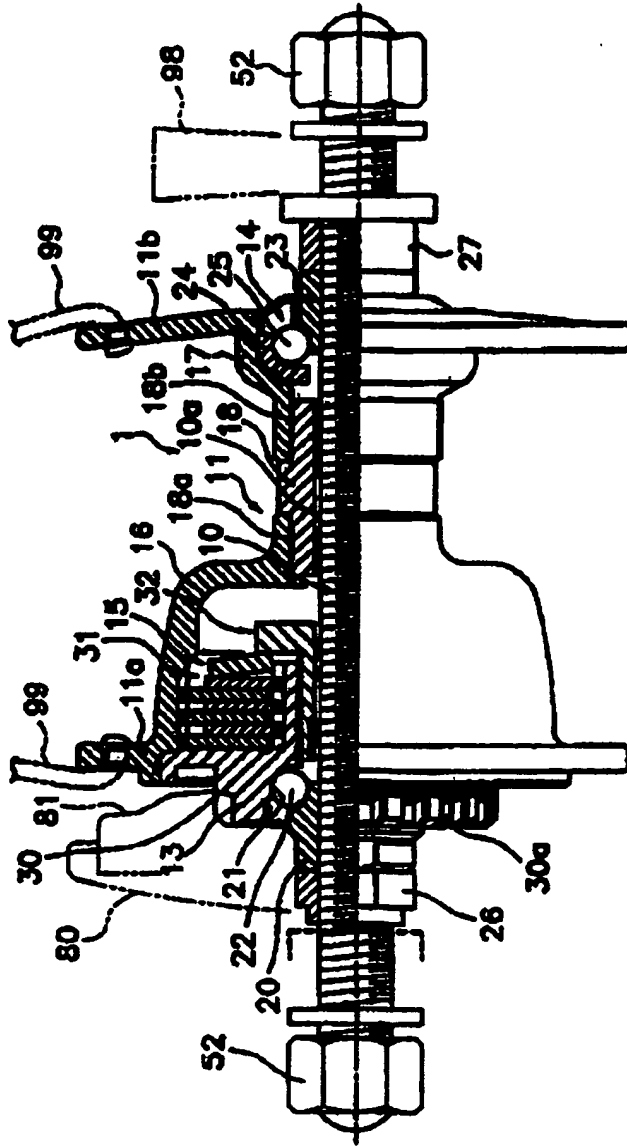
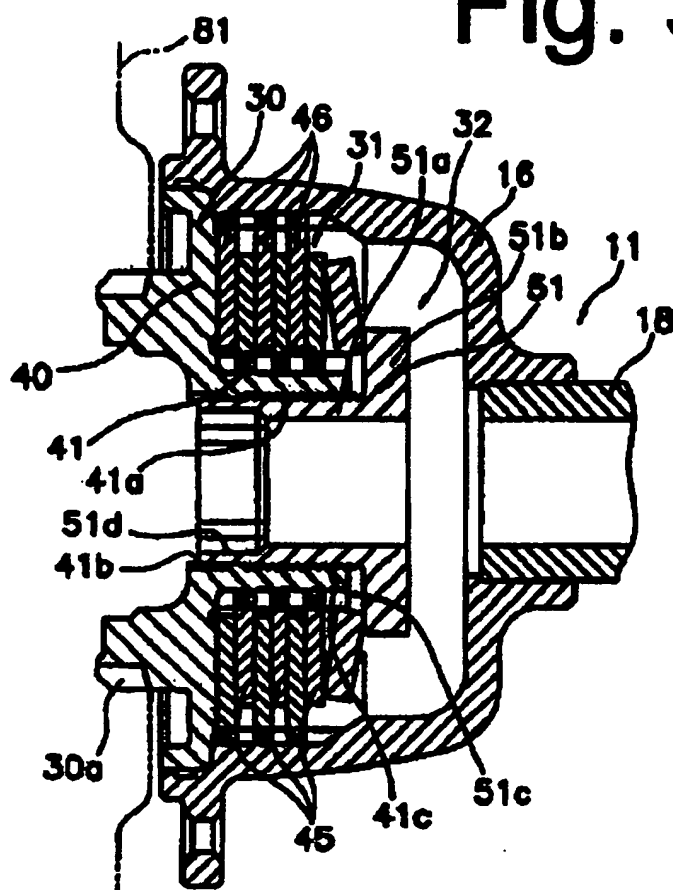


Fig. 2

Fig. 3



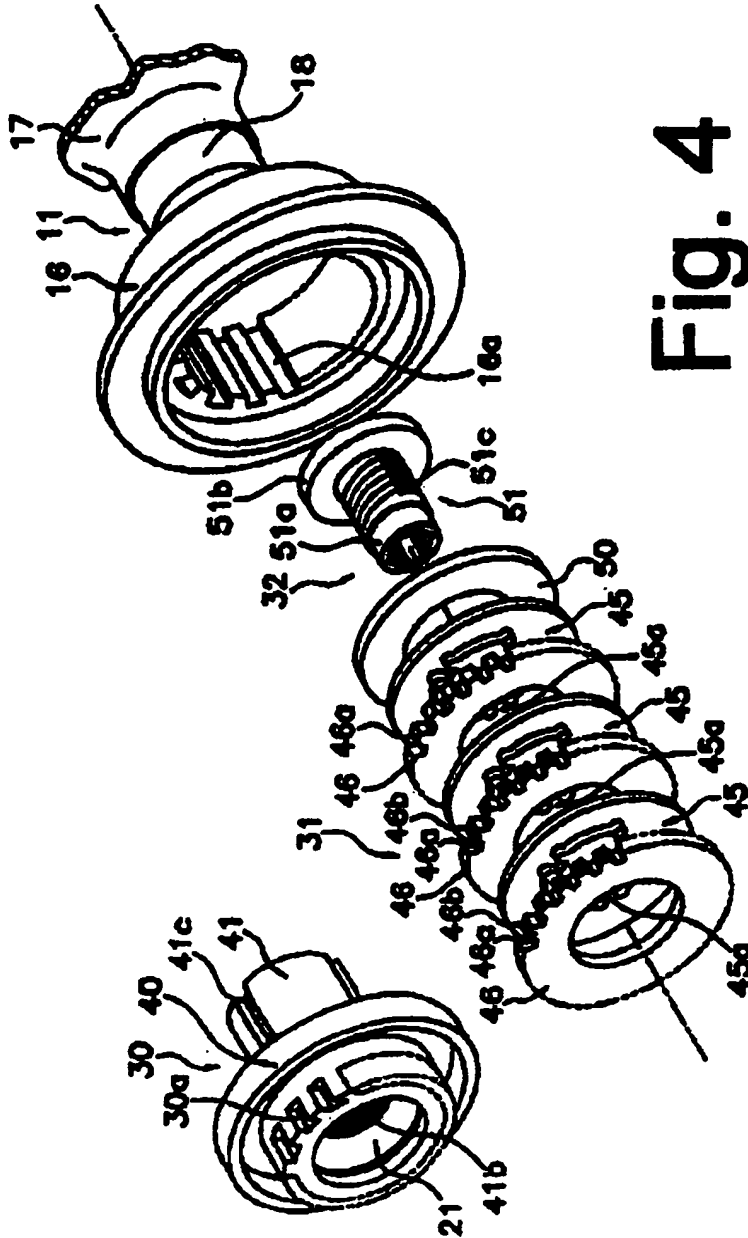


Fig. 4

Fig. 5

